

MEMORY MAPPING FOR PARALLEL TURBO DECODING

ABSTRACT OF THE DISCLOSURE

A routing multiplexer system provide p outputs
5 based on a selected permutation of p inputs. Each of
a plurality of modules has two inputs, two outputs
and a control input and is arranged to supply signals
at the two inputs to the two outputs in a direct or
transposed order based on a value of a bit at the
10 control input. A first $p/2$ group of the modules are
coupled to the n inputs and a second $p/2$ group of the
modules provide the n outputs. A plurality of
control bit tables each contains a plurality of bits
in an arrangement based on a respective permutation.
15 The memory is responsive to a selected permutation to
supply bits to the respective modules based on
respective bit values of a respective control bit
table, thereby establishing a selected and
programmable permutation of the inputs to the
20 outputs.